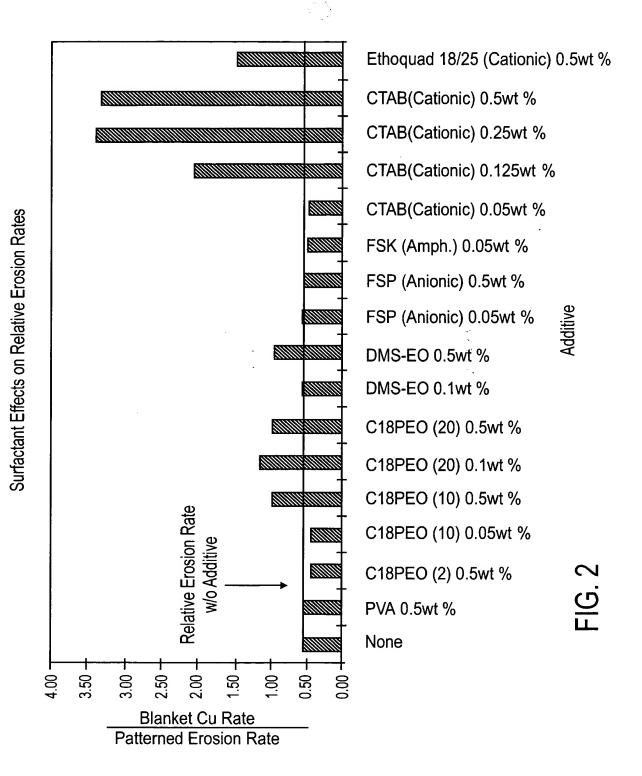


FIG. 1







Blanket Copper and Pattern Density for wout an Additive to Reduce Pattern Sensitive

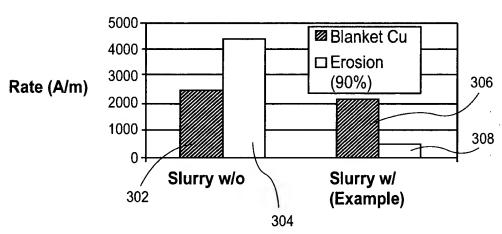


FIG. 3



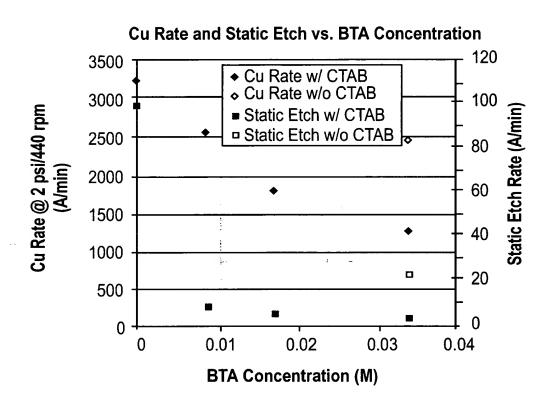


FIG. 4



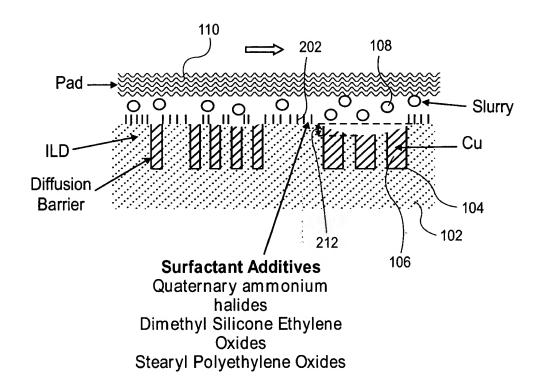


FIG. 5



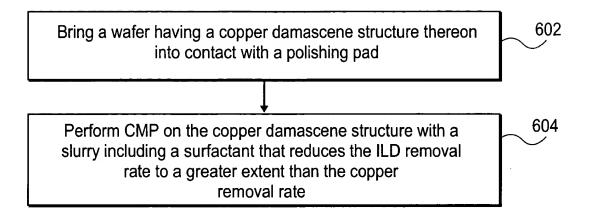


FIG. 6

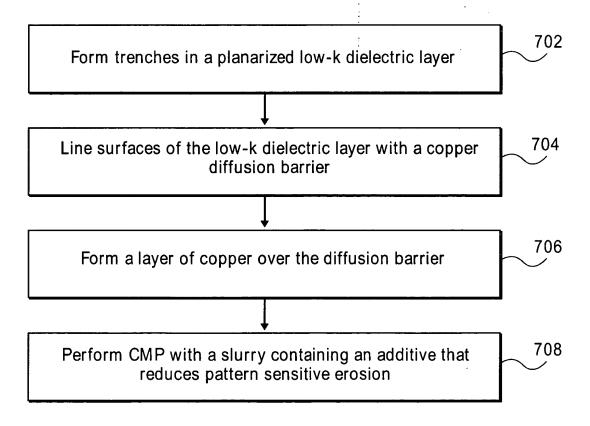


FIG. 7



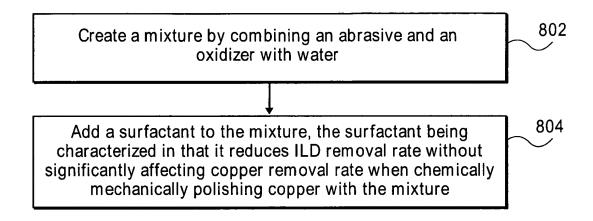


FIG. 8

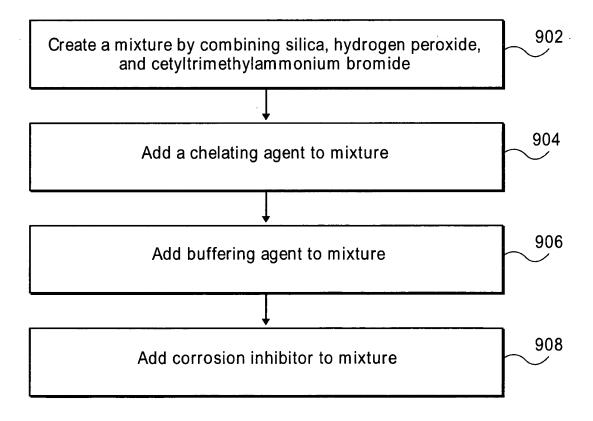


FIG. 9



Abbreviation	Name	Chemical Formula	Surfactant Type	ILD Interation Site
PVA 0.5 wt%	Polyvinylalcohol	[-CH2CH(OH)](MW=85,000-146,000)	nonionic	Si-O-Si, OH
C18PEO(2)	Polyoxyethlene(2)stearylether	С ₁₈ Н ₃₇ (осн ₂ Сн ₂) 20н	nonionic	Si-O-Si, OH
C18PEO(10)	Polyoxyethlene(10)stearylether	С18 Н37 (ОСН 2СН2)10ОН	nonionic	Si-O-Si, OH
C18PEO(20	Polyoxyethlene(20)stearylether	С ₁₈ Н ₃ 7 (ОСН 2СН2)2 ₀ ОН	nonionic	Si-O-Si, OH
DMS-EO	Ethylene oxide modified	Me ₃ SiO{MeSi(O)[C ₂ H) ₃ (OCH ₂ CH ₂)xOMe]}[MeSiO](SiMe ₃)*	nonionic	Si-O-Si, OH
FSP	Phosphate fluorsurfactant	[F(CF2CF2)zCH2CH2O]xP(O)(ONH4)y	anionic	SiOH ₂ +
FSK	Amphoteric fluorsurfactant	F(CF2CF2)yCH2CHO(Ac)CH2N+(CH3)2CH2COO-	amphoteric	SiO, SiOH ₂ +
CTAB	Cetyltrimethylammonium bromide	C ₁₆ H ₃₃ N(CH ₃) ₃ Br	cationic	SiQ
Ethoquad 18/25	Octadecylmethylpolyoxyethylene (15)ammonium	RN(CH3)[CH2CH2O]~7.5H][CH2CH2Q~7.5 HC1*	cationic	SiO
K-Oleate 0.5	Potassium Oleate	$CH_3(CH_2)_7CH = CH(CH_2)_7CO_2K$	anionic	SiOH ₂ +

*Me=CH3, R=Hydrocarbon group, alkyl=Alkyl group

HG. 10